

Title (en)  
OFFSET INSTRUMENT DRIVE UNIT

Title (de)  
VERSETZTE INSTRUMENTENANTRIEBSEINHEIT

Title (fr)  
UNITÉ D'ENTRAÎNEMENT D'INSTRUMENT OFFSET

Publication  
**EP 3302335 A4 20190220 (EN)**

Application  
**EP 16804085 A 20160527**

Priority  
• US 201562170298 P 20150603  
• US 2016034509 W 20160527

Abstract (en)  
[origin: WO2016196238A1] A surgical system for selective connection to a robotic arm includes an instrument drive unit and a surgical instrument detachably coupled to the instrument drive unit. The instrument drive unit includes a first actuator, a linkage member having opposing first and second portions, and a drive member. The first portion of the linkage member is operatively coupled to the first actuator such that actuation of the first actuator moves the first portion in a first direction and the second portion in a second direction opposite of the first direction. The drive member is operatively coupled to the second portion of the linkage member. The surgical instrument includes a driven member operatively associated with the drive member of the instrument drive unit and an end effector operatively coupled with the driven member, wherein translation of the driven member effects a first function of the end effector.

IPC 8 full level  
**A61B 34/35** (2016.01); **A61B 34/30** (2016.01); **A61B 17/068** (2006.01); **A61B 17/28** (2006.01)

CPC (source: CN EP US)  
**A61B 17/068** (2013.01 - CN US); **A61B 17/28** (2013.01 - CN); **A61B 34/00** (2016.02 - CN EP US); **A61B 34/30** (2016.02 - CN EP US); **A61B 34/35** (2016.02 - CN EP US); **A61B 34/70** (2016.02 - US); **A61B 34/71** (2016.02 - EP US); **A61B 2017/00473** (2013.01 - EP US); **A61B 2017/00477** (2013.01 - CN EP US)

Citation (search report)  
• [E] WO 2016183054 A1 20161117 - COVIDIEN LP [US]  
• [XI] US 2014276761 A1 20140918 - PARIHAR SHAILENDRA K [US], et al  
• [A] US 2013172713 A1 20130704 - KIRSCHENMAN MARK B [US]  
• [A] US 7963913 B2 20110621 - DEVENGENDO ROMAN L [US], et al  
• See references of WO 2016196238A1

Designated contracting state (EPC)  
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

DOCDB simple family (publication)  
**WO 2016196238 A1 20161208**; CN 107666866 A 20180206; EP 3302335 A1 20180411; EP 3302335 A4 20190220; JP 2018517483 A 20180705; JP 6714618 B2 20200624; US 10959788 B2 20210330; US 11432891 B2 20220906; US 2018153628 A1 20180607; US 2021177533 A1 20210617

DOCDB simple family (application)  
**US 2016034509 W 20160527**; CN 201680031902 A 20160527; EP 16804085 A 20160527; JP 2017560974 A 20160527; US 201615578797 A 20160527; US 202117177863 A 20210217